

THE
BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. L.

WEDNESDAY, FEBRUARY 15, 1854.

No. 3.

ON A NEW METHOD OF DETERMINING THE QUANTITY OF UREA
IN THE URINE.

BY JOHN W. DRAPER, M.D., PROFESSOR OF CHEMISTRY AND PHYSIOLOGY IN THE
UNIVERSITY OF NEW YORK.

MUCH attention has of late been paid to the methods of determining the composition of the urine, it being very generally acknowledged, that if we possessed the means of a quick and accurate analysis of it, we should be able to settle many contested questions, both in physiology and pathology.

Among the constituents of the urine, the nitrogenized bodies, urea and uric acid, are perhaps of the greatest interest, for they represent the waste which has taken place in the soft tissues generally. Accordingly from time to time new processes have been published for the estimation of these bodies, and more particularly of the first—urea. The methods recommended in the works on animal chemistry and organic analysis are, however, very far from satisfactory. Thus Simon, in his Chemistry of Man, effects the determination of the quantity of urea by forming the sparingly soluble nitrate; and Bowman, in his medical chemistry, resorts to the acetate, but both of these are very tedious and very disagreeable operations, and what is worse, uncertain in their results. Liebig has recently recommended the ternitrate of mercury, but the preparation of the test liquids is troublesome, and since the estimate eventually depends on the production of a particular tint or shade of a yellow color, it cannot be exact.

There are, however, some simple methods which will give absolutely accurate results. These all depend on the principle, that urea and uric acid, when brought in contact with nitrous acid, undergo immediate decomposition with a brisk effervescence, owing to the escape of carbonic acid and nitrogen gas.

The quantity of these nitrogenized principles in the urine may be ascertained by determining the quantity of carbonic acid or of nitrogen thus set free, during the destructive decomposition of urea and uric acid by nitrous acid. Forty-four parts of carbonic acid, or twenty-eight of nitrogen, answer to sixty of urea.

One of these methods, which is extremely exact, I have recently described in the London and Edinburgh Philosophical Magazine. It is to

conduct the disengaged carbonic acid into water of barytes, and weigh the resulting carbonate of barytes.

I have also, in examinations which I am constantly making of the urine, frequently resorted to the other plan of estimating the urea, from the quantity of nitrogen set free; and this I have done in two different ways: 1st, by determining the quantity of nitrogen by weight; or, 2d, by volume. The following is a more particular description of each of these.

A liquid suitable for the decomposition of urea is easily and economically prepared by taking a single cell of Groves's voltaic battery, and placing strong nitric acid in the porous cup, and otherwise charging the cell in the usual way. After a few minutes the nitric acid turns green, becoming charged with nitrous acid. It is then to be decanted for use. If this liquid be poured into urine, filtered from its mucus, or into a solution of urea, a brisk effervescence sets in, and if a sufficient quantity of acid is used, so that red fumes are disengaged, the urea is totally decomposed, carbonic acid and nitrogen gases escaping.

In the first of the preceding methods, viz.: That of determining the urea from the weight of the nitrogen, a known weight of urine (two grammes), filtered from mucus, is placed in a bottle containing a tube filled with the nitroso-nitric acid above described; from the bottle a bent tube conducts the escaping gases through potash water, and then through a chloride of calcium tube. The operation is conducted in the manner well known in laboratories for the analysis of a carbonate; the loss of weight of the whole apparatus gives the quantity of nitrogen which has been set free. This operation requires about half an hour, and is quite exact.

In the second method, viz.: That of determining the urea from the volume of the resulting nitrogen, the operation is essentially the same, only instead of letting the nitrogen escape into the air, it is received into a gasometer, and its quantity ascertained. As conducted in my laboratory, the amount of urea in a sample of urine may thus be determined in from ten to twelve minutes, and with certainty, to one thousandth part of the weight of the urine; a degree of exactness far beyond that of the old processes, and an expedition which at once recommends this method to the physiologist and pathologist.—*Virginia Medical and Surgical Journal.*

ON THE CHEMICO-PHYSIOLOGICAL EFFECTS OF COFFEE.

[A REPORT of some elaborate investigations of the action of coffee upon the human organism, with a statement of their results, by Julius Lehmann, has been translated from the German and published in the last two numbers of the Philad. Med. Examiner. The latter part we copy in full.]

IF we now consider the results of all the investigations and experiments, we arrive at the conclusions:—

1st. That the use of the decoction of coffee produces two important actions in the system, which are difficult to harmonize; viz. stimulating

the vascular and nervous system to greater activity, and at the same time considerably retarding the metamorphosis.

2d. That the stimulating effect above mentioned, so valuable to us from its reviving the wearied spirit, and disposing to thought and promoting a feeling of comfort and cheerfulness, is due to the opposing modifications of the action of empyreumatic oil and caffein.

3d. That the retarding of the metamorphosis is mainly due to the oil—the caffein showing this, *only* when it exists in large quantities.

4th. That increased activity of the heart, trembling, dizziness, delirium, intoxication, &c., are the effects of caffein.

5th. That the increased action of the perspiratory organs, of the kidneys, of the peristaltic action, and of the brain, are the effects of the empyreumatic oil.

If the decoction be too strong, that is to say, if it is prepared in such a way as to contain too great a quantity of both substances for the system, then occur the effects peculiar to both, trembling, activity of the heart, congestion, &c. &c. If we consider these two chief actions of coffee, which are peculiar to some other substances, such as tea, cocoa, spirituous liquors, &c., though in a modified degree, we observe that they are at variance with the general law, that the greater the expenditure of mental and bodily activity, the greater the waste—or rather the metamorphosis of the system. Whether this excitement of the vascular nervous system, occasions more rapidly the destruction of the processes of life, or how these two opposing effects are to be explained, remains for the future to discover.

Concluding Observations.—One, who is familiar with the general law above mentioned, that an increase or decrease of mental and bodily expenditure, is attended by a proportionate increase or decrease of the metamorphosis, will find it difficult to comprehend the strength, busy life and good health of the poorer classes, when he considers these in connection with the very small amount of actual nourishment that they are able to obtain. And, in fact, the existence of such persons would have been inconceivable, if no means of supporting their health and strength had been provided, besides that small amount of actual nourishment. Limited to that alone, there would have been a great disproportion between the amount received and that thrown off; the tissues must have suffered a continual waste, even to the dissolution of life. But instinct has taught them to make use of a substance, which is capable of making a too scanty nourishment sufficient to the system, and by preventing in this way the otherwise unavoidable disturbances of the balances of life.

It is particularly coffee, tea, cocoa, empyreumatic oils and alcoholic liquors, that possess this peculiar influence upon the system, and most of these agree in producing that excitement of the nervous system of so great importance in social life.

If we now reflect upon the distribution of these substances, we find that one of them is used by the people as a common article of food, while the others are enjoyed by the higher classes as articles of luxury. In those countries where one or other of these substances is cultivated, its culture is considered as a matter of chief importance by the people:

thus, in Arabia, coffee ; in China, tea ; in the wine-producing countries, wine. On the contrary, where this is not the case, the choice has fallen almost exclusively on coffee or tea. The reason why the preference is given to these, particularly in Europe, is owing principally to the fact that they exert a far less injurious influence upon the system than alcoholic drinks, and also on account of their valuable action upon the nervous system from the united effects of coffee and empyreumatic oil. For while, by stimulating the reason and imagination, these prepare man for intellectual and bodily exertion ; spirituous liquors, exciting only his imagination, which degenerates by slight excess into confusion of thought, cause, by irritating the nervous system, general debility. These latter, therefore, can be used with much less safety than coffee or tea.

An attentive consideration of the quality and quantity of the composition of coffee and tea, the various modes of preparing them, as well as their action upon the system in connection with the kind of food used, will probably account for the peculiar preferences of nations, for the one over the other. If the composition of tea leaves be compared with roasted coffee, we find that they both possess those substances that are of such great importance—thein, etherial oil, and protein substance. The only difference between them is, that the coffee contains an aromatic substance, and the tea a greater amount of thein, but especially of etherial oil. Three most important effects are produced by these constituents :—1. The retarding of metamorphosis produced by the thein ; but more particularly by the aromatic substance in coffee. 2. The lengthened activity of the brain, produced by the special action of thein and etherial oil. 3. Serving as an actual means of nourishment, by the amount of protein substance contained in them. Coffee influences more directly the metamorphosis, and tea the nervous system. In order to obtain completely these effects of the two drinks, they must be partaken of in substance. This occurs, however, only among few nations, and is probably dependent upon the kind of food used, and their mode of life. The Orientals and Arabs regard coffee as a necessary article of food, and from their custom of drinking it with the dregs, thus making the large amount of protein substance and inorganic constituents serve as nourishment, have unconsciously rendered their very frugal diet less sensible to them. If the plastic ingredients are not of themselves sufficient, yet here comes to their assistance the indirect nourishing property of caffein and the aromatic substance—equalizing their necessities, and at the same time exciting their nervous system.

The Central Asiatic inhabitants of the Steppes, the Buratians, the Mongolians, &c. &c., make use of tea as a common article of food. They prepare it, first, by rubbing the leaves together, then boiling it in water, adding a little salt to it ; after they have poured off the decoction from the dregs, they add to it butter and milk, and meal if they have any, which they roast before adding to the decoction. A person takes per day from twenty to forty cups. But even without meal, and only with a little milk, this tea often serves for weeks long, as the only means of nourishment. We see here again a people instinctively directed, as it were, in the peculiar mode of preparing tea ; unconsciously adding those

substances which are of such great importance, viz., the protein, that become soluble by boiling in salt water, and also a great portion of the inorganic constituents. It is probably here the large amount of thein that influences the metamorphosis. Of course they lose entirely the valuable property of the united action of etherial oil and thein, since by boiling the former is dissipated. This could better be spared though than the other action of tea, which serves as a direct nourishment, which is of greater importance.

The mode of preparing these drinks among Europeans, is very different—not placing much value upon the nutritive substances contained in them, but merely upon those which are capable, indirectly, of nourishing, and those which induce greater activity of the nervous system and the brain. The mode of preparing coffee among the Germans, enables them to obtain, besides the empyreumatic oil, as much caffein as they can possibly obtain from it; while in the preparation of tea, less attention is paid to the amount of thein, than to the etherial oil—the whole amount of which passes over to the decoction. Hence, with them, tea acts only as a stimulus to their brain and nervous system, whilst coffee retards the metamorphosis, and, also, though not in so great a degree as tea, stimulates the nerves. The English, who produce so much meat in their own country, and can generally obtain so much of it that it is even possible for the poorer classes to partake of it daily, besides the protein substances, have less need to prepare their coffee in such a manner as to obtain from it indirect nourishment. Since, however, they feel the want of spirits and excitement, their choice has fallen upon tea, which promotes these better than coffee.

We find among the poorer classes of Germany, where meat is so rare, and considered so great a luxury, that they are obliged to substitute for it such poor food as potatoes, &c., which consist of substances which indeed satisfy their hunger, but yet are not fitted to prepare them for very great exertions. The feeling of mental and physical lethargy experienced by them, and produced by this spare diet, becomes much more evident if they suffer from the want of coffee. The rapid diffusion and yearly increase of the consumption of coffee, is an evidence of the great importance it has attained in social life.

Whilst, at the beginning of the last century, it was considered a luxury by the higher classes, it has now become a necessary article to all classes, wherever food is scarce and dear. Of its total production, which amounts annually to 300,000,000 of pounds, two thirds are consumed by the Europeans, whose exertions appear so disproportioned to the actual means of nourishment. In the Zollverien States of Germany, the consumption of it amounted, in 1851, to one hundred millions of pounds, or one sixth of the total production. Upon each reduction of duty, millions of pounds more were consumed by the people. The consumption of coffee and potatoes, from the period of their general introduction, have gone hand in hand. We see the poor instinctively valuing coffee more, the more they are limited to potatoes as their chief food.

The Substitute (Surrogate) for Coffee.—At the time of the Continental embargo, the want of coffee was felt for the first time in Ger-

many, and the necessity of possessing some such drink, led to the adoption of other substances produced there, to which, by roasting, a taste similar to that of coffee could be imparted. Notwithstanding the general introduction of coffee again, and its greatly-increased production in the colonies, and the reduction of duties, which naturally made it cheaper, the consumption of the substitute was not lessened, but increased so as yearly to amount to 100,000 cwt. The opinion that Knapp, as well as other authors, has started, that this substitute is entirely deficient in those substances so valuable to the poorer classes, can be refuted if we examine its composition, and remove the idea that caffein is the only efficacious substance in coffee. The materials which they have chosen as substitutes, and which may be increased indefinitely, all undergo the same process as coffee, viz., roasting; by which the aromatic substance is evolved, and by which is effected that retardation of the metamorphoses of such great importance to the poorer classes. The roasting thus produces not only a taste similar to coffee, but also imparts to it one of its most important properties. Still we cannot be indifferent to the great deficiency that exists in the substitute; viz., the total absence of caffein, thus losing that valuable influence upon the vascular and nervous system and upon the brain. Since, however, surrogate is about from five to eight times cheaper than coffee, and possesses a part of the peculiar action of the latter, we cannot wonder at its having attained, among the poor, to such a general use.

"THE CHANGE OF LIFE" IN WOMEN; WITH REMARKS ON THE PERIODS USUALLY CALLED "CRITICAL."

[Continued from page 482, vol. 49.]

FROM the earliest period of infancy to mature age, there is a constant progression in the development of the human organism. There are organs, which may be comparatively useless in feeble infancy, that are destined, in the course of ripening years, to serve essential purposes in the human economy; while others are from month to month, and from year to year, modified in their capacity, and prepared to perform functions, which, though similar in kind, differ materially in degree. The babe, as it reposes upon its mother's bosom, careless of all surrounding objects and influences, is itself a passive being. Its eyes may be open, and appreciate the surrounding light; and yet, while the objects within its visual range may be daguerreotyped upon the miniature retina with distinctness, there is no evidence of an intelligent impression being transferred to the brain. The brain, as yet, may be considered a latent organ. It is the unpolished plate, waiting for the hand of the artist, to *change* its surface, and fit it for the reception of the impression, already pictured within the frame work of the instrument. In the lapse of time, the cerebral function becomes apparent; the child evidently exhibits the phenomenon of mental perception; thought is elaborated, and the period comes when judgment, like a feeble stem, sprouts forth, and continues to grow, through constantly multiplying changes, till it assumes the type awarded

by the Great Disposer, appropriate to the finite condition of its possessor. Again, in the early period of life, the infant is only capable of receiving such nutriment as does not require mastication; nature has indicated this, most certainly, in withholding the teeth from the child, and supplying a maternal fountain, equal to its wants. The stomach, at this stage of existence, is not capable of appropriating the stronger food that it will afterwards demand as essential to the vigor of the individual. A *change* must be wrought in the organ, to meet the *change* of circumstances—and as it may be matured, the teeth come and go again, in pairs, the jaws widen, and the muscles, covering and moving them, strengthen, so as to execute the stern demands of a *natural law*. As the brain and its appendages connected with vision, so the stomach and its appendages connected with nutrition, *change* in their size capacity and power, from year to year. And as the former may be said to be the centre of the nervous system, and the latter the centre of the nutritive system, there is a corresponding *change* in the power and susceptibility of the equalizing medium, exhibited in the nervous arrangement with which they are both essentially connected. It is the telegraph by which disorder is announced. If the brain or the nervous system becomes deranged, the stomach and nutritive system feel it, and *vice versa*: while either, with a powerful reflex action, may agitate the whole organism. Hence, the familiar examples of disease incident to the period of dentition, the details of which it will be needless to enumerate, as the reference here made to the subject of early childhood and its *changes*, is merely for the purpose of affording an analogy, from which to derive a confirmation of the doctrine, presented in the introductory essay, viz., that the "changes of life" in women are natural, and not to be interfered with, unless some abnormal symptoms accompany them.

The peculiarities of childhood already noticed, are natural to both sexes; but the first great *change* to which the human female is subject, is menstruation. The word menstruation means simply a monthly flow. Its etymology does not embrace the character or quantity of the discharge, referring only to its periodicity. The organs from which it comes, are the uterus and its appendages. Its office is to transform the girl, from girlhood to the estate of a woman. It performs its office by developing a latent organ, hitherto inactive and apparently useless. Power is exhibited by the transformation—power to conceive and to mature a living human being.

The period for the appearance of the menses, called *menophaenia*, occurs generally in this climate between the ages of 12 and 14 years. We then have before us, at this age of female life, a new organ with its appendages, and a new function. To examine them briefly, in connection with their sympathies and relations, will be the object of this essay.

A new organ—a womb. For twelve years it has lain in its pelvic bed, without alteration, except a very gradual increase of size, to maintain its progressive relation with other parts of the economy. A truncated conoid body, flattened somewhat upon its surface, nearly an inch in thickness, about twice that length, and in breadth perhaps midway between the two. It has a body and a neck, with a slight fissure or cavity

occupying its interior, and of the same shape, terminating below in a corresponding opening, called its mouth, or *os uteri*.

Its appendages—Fallopian tubes, situated above and on either side, communicating with the upper angles of the internal cavity, by extremely small openings, and extending laterally four or five inches, at first straight and narrow, but in their course extremely tortuous, till they terminate in a wide fringe, called by anatmists the *fimbriated extremity*.

The ovaries—two ovoid bodies, containing a clear fluid, placed on each side of the uterus, and supported by the uterine ligaments, into which one of the tendrils of the fringed extremity of the tube before described terminates in order to form a direct communication with the cavity of the uterus.

The vagina—a canal or opening five or six inches in length, embracing the neck of the uterus above, and terminating externally.

These varied and complicated structures spring speedily into new life—become sensitive and excitable. The entire system sympathizes with the effort, and there is a rapid change in the whole being—a change too familiar to need detailed description.

Consider for a moment, however, the extent of this change. The womb, and its immediate tributaries, if I may so call its appendages, are not only concerned, but they make a demand upon the heart, and through it upon the entire circulatory system—the spinal marrow, and through it the entire nervous structure—the brain, and through it the intellect and moral nature, until all are forced into the work. The heart beats more vigorously perhaps, and the pulse is more rapid. The nervous force is distributed, it may be with some inequality and excitement. The brain is more acute, and the moral sensibilities more intense. Such a general change in the habits of the constitution, in the character and development of mental phenomena, in the degree and force of moral impressions, renders this period one of great interest, while the organs concerned in this process are being gradually developed. Their peculiar function appears at once—sometimes without premonition. The discharge often comes on in a moment, or the child may rise from bed in the morning, alarmed by the presence of a bloody flow from her body, she knows not whence, or how; and if the general health be good, if her mode of life has been natural, if her mind has not been over-taxed, and her body subjected to irregular pressure or constraint, it comes even suddenly, without danger—but more of this hereafter.

What a wonderful provision of nature. It affords to the human female a characteristic mark, not known to any other being—a mark distinguished by a sanguineous flow from the uterus, every lunar month, which continues from three to six days, and measures in quantity from eight to ten ounces. Does it cause the general development of the system, or is it the result of growth in the individual? This is a question unsettled by physiologists; all we can say upon the subject is, that the menstrual development is coincident with the general increase of size and power in the mental and physical frame—that its occurrence makes an important *change* in the habitudes of the individual, and that it is a natural appearance, and essential to a healthy condition of mind and

body. Its sympathies, then, are with every part of the human structure because it maintains a relation to every part: without it, there cannot be perfection in development. With it, properly regulated and sustained, there may a perfect existence. If its appearance is modified by excess, or the reverse, there is a corresponding modification in its relations to other organs, its sympathies become morbid, and disease is the result. So, again, there may be a power over the uterine system, employed by morbid changes occurring in other organs: a power sufficient to arrest the menstrual flow, to diminish or to increase it. As has been said already, the telegraph by which these sympathies are conducted, is the medium of equalizing disturbed and opposing forces; and if we regard not the nervous system in our therapeutic appliances to disorders of menstruation, we shall fail to display that tact and wisdom which should ever emanate from and adorn the medical profession.—*New Jersey Med. Reporter.*

[To be continued.]

FRACTURES OF THE FEMUR.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—The subjoined remarks upon fractures of the femur embrace the substance of an address delivered before the Franklin County District Medical Society; and if they are worth printing, they are quite at your service.

Respectfully yours, JAMES DEANE.

Greenfield, February, 1854.

The subject of fractures of the femur has engaged the attention of physicians in all ages. In the entire department of mechanical surgery no other topic has been so constantly discussed; there is none in which invention has been so much invoked or so completely exhausted. There is none in which the physician and the patient have each such abiding interest, where his responsibilities are so onerous or his professional conduct held to such strict accountability. The physician stakes his reputation upon the treatment of every important case of fracture he may assume. If he fail, no matter where the fault rests, the public admits no extenuation. It assumes that the physician is competent to every emergency, that the art of treating fractures is purely mechanical, subject to mechanical laws, which tend to inevitable results.

The profession knows better. It knows that the complicated human organization, subject as it is to the multiplied combination of physical laws, is yet controlled by the higher principles of animation or vitality, and hence mechanical surgery is not simply mechanics, it is also physiological; and hence, too, the subject is viewed from different points by the physician and the public. The public sees nothing but mechanics, but the physician comprehends the reciprocal relations of the vital and physical principles of the human constitution; and it is in truth because these correlative functions are not always appreciated or regarded by the physician, he often hazards more misfortune to himself than to his patient.

Now why is it that the intelligent physician cannot count upon the

certainty of success in the treatment of fracture of the thigh? He certainly expects he shall attain it, for he has given the subject a thorough investigation, as he honestly believes; has consulted the authority, law and gospel of fractures; and, to put the matter beyond the contingency of doubt, has secured the last great bubble, the "New Double Compound Spiral Self-adjusting Extensor" for example, capable, as the inventor asserts, of stretching the limb to the utmost capacity of endurance, and yet he don't understand how it could possibly happen that the limb is, after all his solicitude and all his attentions, shorter than its fellow. He is confounded and mortified, and may perhaps console himself with the reflection that the difficulties in the case were insurmountable. But, after all, the question will occur again and again, why it was that a result so unexpected and disastrous ever happened?

I think it in a great measure depends upon the fact that we have been taught to trust too much to false mechanics, and do not discover it perhaps until some misfortune puts us upon original inquiry and self-reliance. We have trusted too much to hearsays and authoritative dogmas, and to those unphilosophical machines that are periodically foisted upon the credulity of the profession, which disgrace and plunder the physician, and ruin the patient. I will confess that the errors I imbibed in my elementary studies disqualified me for that measure of success which I might at a later day confidently expect to attain. I was thoroughly imbued with the mischievous doctrine of the double inclined plane and other equally dangerous contrivances; but I soon saw the necessity of stripping my mind of the errors it had acquired, and of adopting those just principles of practice that alone could overcome with certainty, and at the same time with the greatest possible comfort to the patient, the consequences of a fractured thigh. The simplicity of a rational practice founded upon the laws of organization, rather than upon the power of mechanics, surprised me, for I had supposed that the complicated appliances of the times were applicable to any case of fracture that might occur. But I have long since discarded the use of ready-made machinery, and have discovered from observation that it is altogether best to be destitute of collections of fantastic apparatus; for if we rightly understand, in the first place, the combinations that go to make up a case of fracture, the remedies will suggest themselves, and they are always simple and within our reach.

[To be continued.]

TYPHOID FEVER.

[Communicated for the Boston Medical and Surgical Journal.]

OCTOBER 16, 1853, I was called to see Herbert W., 6 years of age. Symptoms—Severe pain in the head, back and limbs; sharp pains in the abdomen, which is slightly distended and quite tender on pressure over its whole extent; tongue coated; skin hot and dry; face flushed; pulse 132.

I was informed that he came home from school on the 14th, complain-

ing of headache and pain in the bowels ; ate no supper, and was feverish and restless through the night. Has complained of headache occasionally for a week past. **R.** Pulv. rhei, hydrargyri chloridi, $\frac{aa}{2}$ gr. iij. To take the neutral mixture with the spirit of nitric ether every fourth hour.

Oct. 17.—General appearance of the patient about as yesterday. Has been delirious through the night. Has had two alvine discharges. Pulse 120. Continue the treatment.

18.—Thinks he did not sleep any last night. Has had a dozen or more alvine discharges. Pulse 112. Considerable prominence of the abdomen. Complains mostly of pain in his bowels. **R.** Pulv. ipecac. comp., gr. j.; pulv. ipecac., gr. $\frac{1}{4}$. To be taken every fourth hour in addition to the previous treatment.

19.—Slept better. Has had seven or eight alvine discharges. Abdomen a little fuller than yesterday, and quite tender on pressure. Pulse 120. Continue the treatment.

20.—Did not sleep as well. Bowels have not been opened. Pulse 120. Omit the powders.

21.—Has had several alvine discharges. Pulse and general symptoms about as yesterday. Continue the treatment.

22.—Abdomen quite tympanitic. *Several rose-colored spots* below and on each side of the umbilicus. Has had a dozen alvine discharges during the last twenty-four hours. Has seemed somewhat stupid. Talked much in his sleep last night. Coat upon the tongue is assuming a darker and dryer aspect. Pulse 120, small. To continue the treatment and apply cold water steadily to the head.

23.—Lies with his eyes half closed ; pupils dilated, and contract sluggishly upon the application of light. Does not answer my questions or seem to hear me. Pressure upon the abdomen causes him to start. Cannot get him to protrude his tongue. Teeth loaded with dark sordes. Extremities cool. Pulse 112, small. To continue the cold applications to the head, and apply sinapisms to the feet and legs. To take one grain pilulæ hydrargyri every fourth hour ; also five drops olei terebinthinae in emulsion every fourth hour.

24.—General appearance about the same as yesterday. Has had occasional stertorous respiration. Has had two alvine discharges. Pulse 112. In addition to the treatment instituted yesterday, to have a small blister upon the right side of his abdomen, and take eight drops of the following every fourth hour : **R.** Spirit. lavend. comp., $\frac{3}{2}$ ss.; tr. camph., 3 j.; aquæ ammoniae, gtt. x. To take black tea with an equal quantity of milk for nourishment.

25.—Has passed a restless night. Seems to take no notice of anything. Pupils dilated, but contract sluggishly upon the application of light. Pulse a little variable, beating sometimes but 26 times in a quarter of a minute ; sometimes 28. Extremities cool. Has had one alvine discharge. Tympanitis has continued about the same as on the 22d. To continue the treatment, and have sinapisms again applied to the legs. To be fed with beef-tea as freely as he can be induced to take it.

26.—Since last evening the stupor has alternated with turns of de-

rium, in which he throws himself about and cries aloud. When lying with the eyes *closed*, the *pupils are contracted*; but when aroused, they are dilated. R. \AA etheris sulph., 3 j.; camph., 3 ss. M. To take five drops every second hour. R. Ammonia carb., gr. xv.; water fifteen teaspoonsful. Dose, one teaspoonful every second hour; to be taken alternately with the preceding. To continue the pil. hydrarg. and the cold application to the head.

27.—Has had several turns of throwing himself about, crying and moaning, but without seeming to make the least attempt to utter any articulate sound. Has had three alvine discharges. Pulse 96. Pupils in the same condition as yesterday. Continue the treatment.

28.—Is having the same turns of delirium as yesterday. Skin still remains hot, although the extremities are cold by turns. Has had three alvine discharges, dark colored and offensive. Pulse 104. Pupils dilated. Continue the treatment.

29.—Pulse 100. Pupils less dilated, and contract better upon the application of light. Turns of delirium are frequent, the intervals between them being not more than fifteen or twenty minutes. He screams so loud as to be heard at some distance from the house, and till he seems quite exhausted. To continue the treatment.

30.—Passed a restless night; but for the last two hours has lain more quiet. Has had three alvine discharges. Pulse 112.

31.—Has had a restless night. Has had five alvine discharges. Pulse 120. To substitute wine whey for the camphor and ether, in doses of two teaspoonsful to be taken alternately with the ammonia; each every hour.

Nov. 1.—Rested quite well the first part of the night, but is more restless this morning, and is screaming and moaning most of the time. Hands in a constant tremor. As I was examining his gums, he opened his mouth, and after several ineffectual attempts protruded his tongue. It was partially protruded and again drawn back several times before he succeeded in getting it out. The tip was clean and moist for half an inch; the remainder loaded with a thick brown dirty coat. Gums slightly swollen. Has had four or five alvine discharges. Extremities cool; pulse 112, very small. Omit the pil. hydrarg.

2.—Has had a restless night, but is quiet now. Pupils are now natural. A constant tremor of the fingers, especially of the left hand. Pulse 120, very small. Continue the treatment.

3.—Slept considerable yesterday afternoon, but had a restless night. Coat upon the tongue looks loose; and a piece has already peeled from the centre, leaving the surface somewhat red. Pulse 120. To take twelve drops of comp. spt. sulph. \AA ther with each dose of wine whey.

4.—Slept in all four hours last last night. Hands very tremulous; skin cool; pulse 120, very small; coat entirely gone from the tongue.

5. Slept some the last part of the night. Tongue coated again at its base, the tip remaining clean. Is constantly picking his thumbs. Subsultus tendinum so great that I cannot distinguish the pulse at the wrist. To take one and a half grains of Dover's powder every fourth hour.

6.—
to, but

7.—
most a
napkin
with c

8.—
spittin

9.—
very lo
tening
with c

10.—
Bowe
Pulse

11.—
latter
by no

12.—
night
upon

14.—
rious t
alvine
articu

15.—
questi
cleaned
irregu

Fre
amou
tirely
specie
appea

At

To

Sir,—
had m
in yo
only i
the re
piries
singula
profes

Th

6.—Slept in all about two hours. Protrudes his tongue when asked to, but shows no other sign of consciousness. Bowels more tympanitic.

7. Rested better. Had a turn of *spitting* yesterday, which lasted most of the afternoon. The saliva was in such quantity as to wet a napkin through in a short time. This morning had a turn of *trembling*, with chattering of the teeth. Subsultus tendinum about as yesterday.

8.—Slept well the first part of the night. Has had several turns of *spitting*. Screams very loud at times. Has had one alvine discharge.

9.—Did not sleep more than half an hour last night. Is screaming very loud, and trying to get out of bed. Has had more turns of chattering of the teeth. Omit the Dover's powders. The head to be bathed with cold water.

10.—Slept most of the time from 5 o'clock, P.M., till midnight. Bowels hard, but are not much distended. Less subsultus tendinum. Pulse very irregular in frequency and force.

11.—Slept well the first part of the night; but was quite restless the latter part. Has had two alvine discharges. Answers questions readily by nodding and shaking his head.

12.—Had a quiet day yesterday, and rested well the first part of the night. Has had two alvine discharges. There are several large boils upon the abdomen and two upon the back.

14.—Rested well the first part of the night, but has been very delirious the latter part. Sweat a little yesterday afternoon. Has had two alvine discharges. Pulse irregular. *Spoke twice yesterday—the first articulate sounds he has uttered since October 22d.*

15.—Speaks very slow, but can be readily understood. Answers questions rationally, but keeps repeating his answers. Tongue has again cleaned, and its base is again covered with a white fur. Pulse 84, irregular.

From this time the improvement was steady and gradual. The amount of stimuli was gradually diminished till the 22d, when it was entirely withdrawn. There was at this time considerable slowness of speech and irregularity of the pulse. Both, however, soon entirely disappeared, and the recovery was perfect.

A. N.

Attleborough, Feb. 8, 1854.

THE STUDY OF LIVING ANATOMY—REPLY TO DR. KING.

To the Editor of the *Boston Medical and Surgical Journal*.

SIR,—In my communication upon the subject of **LIVING ANATOMY**, I had no idea of countenancing empiricism, upon which I had previously in your pages, and in reference to quackery, given my opinion. It was only in conformity to the advice of the venerable Rush, that is, to profit the regular profession, when it can be profited, by the practice of empirics, that I made that communication; together with the relation of a singular case of fracture of the thigh-bone, in an esteemed member of the profession.

The three points of improvement were:—

1. Ascertaining, in the living subject, the precise connection of the bones in their sound and normal state, with their protuberances, depressions, size and length, as far as possible by *taxis* through the integuments ; and that this, in actual practice, can be more correctly done than by seeing the dead bones of a skeleton.

2. Instead of extension and counter-extension, in some cases of luxation, making levers of the bones ; which in a few instances before his decease, a very celebrated professor of your's and my acquaintance, actually adopted.

3. In reducing dislocations and fractures, to seize the precious moment, when the muscles and *mind* are in an entire state of quietude and relaxation. This I consider a vastly important improvement. Any one else who considers these suggestions of any weight, is respectfully referred to my hints on *living anatomy*, published in your pages.

As to the *aqua fortis* and distorted reply to my remarks, by Dr. King, of Taunton, I will answer by an anecdote of a certain judge in Virginia, who happened to enter a religious meeting just as the *holder-forth* was threatening his audience that he would accuse them for their misdeeds at the day of judgment. The judge said that he had occupied the bench for thirty years, and always found the greatest criminals and rogues the first to turn State's evidence.

JOSEPH COMSTOCK, M.D.

Lebanon, Ct., Feb. 6th, 1854.

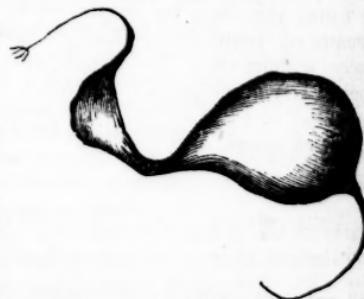
ENTOZOA.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—I have now in my office a specimen of entozoa which is entirely new to me, and which I am unable to name from anything I have ever seen or read upon the subject ; and hoping to elicit some information in regard to it, I hereby send you a rough sketch of it which I have made. You may rely upon its being a *fac simile*, as to size and shape.

This and another similar one was passed by a little girl about 5 years of age, after taking a dose of calomel. The color was much like that of the *lumbricoides*. It was alive, and would writhe what appeared to be its tail for some time after its expulsion. Its anterior extremity has the appearance of a miniature elephant's proboscis, and was fimbriated at the end. There was no appearance of any other extremities. As will be seen by the drawing, it has much the shape and appearance of a young bird, minus wings and legs.

The patient had long been complaining, and was much emaciated ; had variable appetite, pain in the bowels, constant diarrhoea, and other



symptoms of verminous irritation. She had previously been treated with various vermisfuges without success. Several weeks after passing these, her symptoms not having mended any, and all other anthelmintics having failed, it occurred to me to use the pumpkin seeds. Accordingly I directed the mother to rub up two ounces of the seeds and make an emulsion, and give one half at a dose, and the balance to be given in two hours ; and this to be followed by half an ounce of ol. ricini. The first dose was given, which appeared to produce very alarming effects, the child writhing and screaming with pain in the bowels. The balance of the emulsion was, therefore, not taken, but a dose of oil was immediately given, which operated powerfully, in a short time bringing away over one hundred of this kind of animals. None of them exceeded in size the one I had in my office, but varying from that down to a very minute size. After their expulsion the patient rapidly regained her health and strength.

Cameron Mills, N. Y., Feb. 2, 1854.

S. MITCHELL, M.D.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, FEBRUARY 15, 1854.

Yellow Fever of British Guiana.—Although the volume which is the subject of this paragraph, passed through its third edition in 1852, the disease of which it treats must always command the thoughtful attention of those who have witnessed its extensive ravages in this and other countries. Daniel Blair, M.D., Surgeon General of Army Hospitals, &c. in British Guiana, now temporarily residing in New York, gives an elaborate and carefully detailed account of the last *Yellow Fever Epidemic* in the colonized portion of country lying between the sixth and eighth parallels of north latitude, and known as a kind of tropical Holland. The edition before us was edited in London, by John Davy, M.D., &c., Inspector General of Army Hospitals. It comes out in octavo, beautifully printed, and illustrated by a few admirably executed copperplate engravings. Our limits are too circumscribed to do justice to the labors of Dr. Blair, as an observer and scientific writer. The inability of the profession to contend successfully with that destructive disease, yellow fever, is universally acknowledged. There are localities where medicine seems to have had some power; but the most skilful practitioners, every where, have had to succumb in the end, and acknowledge themselves powerless in arresting the progress of the greatest pestilence, next to cholera, of the age. Dr. Blair resorted to local blood-letting, in some forms of the epidemic yellow fever of Guiana; but in all cases, he remarks, "the more economical the expenditure of blood, the better." He found antimonials generally prejudicial. Salts of opium in his practice were always dangerous. The sum of the treatment may be inferred from the following extract, on the 107th page.—"The *materia medica* of the practitioner in yellow fever might, after the experience of the entire epidemic, be almost included in the following list, viz., a compound of calomel and quinine, in the proportion of 20 grains of the former to 24 grains of the latter, and known in my prescription at the Seamen's Hospital, and on the boards at the head of the patients, and in the case books of

the resident surgeons, by the symbol 20 and 24; castor oil; water; cantharides blister; Rhenish wine; chalk mixture—without any essential oil; creosote; liquor potassæ; ammoniacal paste; sinapisms; musk; carbonate of ammonia; spirit of mindererus; magnesia; laxative enemata, and lemonade. The dietetics were barley water, sago, arrowroot, tea, chicken broth, beef tea and toasted bread." It would hardly be worth while to pursue the subject further, since our Southern friends have so recently run the entire circle of medical practice in this disease. Whether Dr. Blair's book is to be found in the libraries of our medical men, we do not know. If not, those of them at least who reside where the yellow fever, in any of its aspects, is prone to appear, should obtain it. Dr. Blair is a highly-educated physician, and a clear, logical writer. As a recorder of facts, which, after all, are the only guides that can safely be followed in the plan of treatment of any disease, he is both accurate and precise. While in the United States, he should be received by the brotherhood with that kindness and distinction to which a gentleman of high standing is entitled at their hands.

Lowell Bill of Mortality.—For several years past, we have spoken in terms of commendation of the manner of making up the returns of mortality in the city of Lowell, Mass. The present year there are a plenty of figures and tabular forms, but not quite enough in the way of commentary on the sanitary condition of the city, such as the subject would naturally suggest in the mind of a medical official. Total mortality in 1853, 734. The year before, the number of deaths was 605. No particular epidemic marked the year; but the population is gradually increasing, and the greater mortality is simply proportioned to the number of the living. It seems that nearly one-fourth of the deaths were by consumption. Lowell, as a residence, is unobjectionable, on the score of healthfulness; and its physicians are acknowledged to be gentlemen of experience, enterprise and skill. Drs. Dalton, Green, Allen, Graves, besides others whose names are familiar to the public, are among the most talented practitioners in the Commonwealth.

Professional Letters from Europe.—A series of interesting and instructive epistolary communications were sent to the Nashville (Tenn.) Medical and Surgical Journal, in 1852, by Paul F. Eve, M.D., the assistant editor, who has revised them, and presented the collection in a new form for the medical public. We recognize in the author's graphic account of the Paris and London hospitals, a correct picture of those celebrated schools of the healing art. No one could be better qualified to appreciate the excellencies, or to detect the existing defects, in those institutions, than Dr. Eve. To a high professional character, he unites, in an eminent degree, the qualifications of a scholar and a critic. What disposition is to be made of the publication, is quite unknown to us—whether it is to be on sale, or distributed among friends and acquaintances exclusively. This much, however, is certain; those who are so happy as to procure a copy, may be sure of possessing some pleasant and useful reading for a medical and surgical practitioner. Medical students destined to visit the same institutions, would find Dr. Eve's graphic description of men and things in their particular line of study, a very useful key to them.

Bloodletting.—Dr. S. Jackson, of Philadelphia, late of Northumberland, has, within the last three months, read two papers before the Philadelphia

College of Physicians ; one on the use of calomel in the diseases of children—and the other on bloodletting. Both are reported in full in the last number of the Transactions of the Society, and constitute an important part of the number. From the latter, we copy two paragraphs, which will show the author's opinion of the practice, and his mode of treating the subject.

"I have said that extremes beget extremes in the opposite direction ; that physicians seem to boast how little blood they draw, and that we are threatened with a general *haemophobia*. I have heard one great practitioner say that he has not drawn a pint of blood for a whole year ; another says that he often goes out without his lancet ; others say that any loss of blood is an evil not to be suffered, unless to avoid something worse. When I was in my juvenescence, probably about fifteen years old, I was overwhelmed one spring with sleepiness and oppression for several weeks, almost unable to make any exertion, or to keep open my eyes. I was bled for the first time in my life, and instantly restored to perfect health, vigor, and activity. I have often met with similar cases, and have always cured them by bleeding. Surely this loss of blood was not an evil, or did we never hear of there being too much of a good thing ? Here was no disease, organic or functional, nothing but simple *hyperemia* that wanted a floodgate.

"As to the opinion that loss of blood is an evil to be suffered only to avoid a greater, I do not find anything new in this choosing of the less of two evils. Men who have been doctorated, are surely too old to be taught this lesson. Would they, like the school master in *Perseus*, feed us with pap and sing us to sleep with a *lala* ? We are not now to be told for the first time that all good things have their concomitant bad things. The taking of our daily food is a very great evil ; it costs money that had better be given in charity, or spent in some intellectual gratification ; it wastes much precious time ; it leads people into the temptation of eating too much, thus injuring their health ; a thousand evils might be found in a few minutes, yet no one declaims against eating, no one calls it an evil to be tolerated only to eschew a greater. But I am wrong ; for Hierocles tells us, that a certain Athenian thought it a great evil to feed his horse, and that he would teach him to live without eating ; the horse learned the lesson, but having learned it, he died. I would then recommend to all my brethren who look upon bleeding as an evil, and are desirous of learning to live without, to take a hint from Hierocles, lest they die in the schooling."

Hospital for Consumptives, in England.—As the subject of founding a hospital exclusively for consumptive patients has frequently been discussed in this country, considerable interest is attached to it, and we therefore copy from the *London Lancet* a brief notice of a late visit to the hospital of this kind at Brompton.

"We lately," says the writer, "paid a visit to this hospital, the practice of which bears upon one of the diseases which prove most destructive in this country. It would, however, be an error to suppose that none but tubercular diseases of the lungs are treated in the institution : we noticed, both among the out- and in-patients, cases of bronchitis, pneumonia and cardiac affections. These diseases, as is well known, are also treated (and even on a large scale) in general hospitals ; but it must be confessed that in this special institution all the domestic arrangements, the heating and ventilating of the wards, are calculated to place the patients in the most favorable condition for recovery, where such a termination is possible. The ventilation is so managed, on the plan introduced by Dr. Chowne, as to

keep the room free from any noxious emanations, and the temperature is kept perfectly equable by means of warm air.

"We were struck by one circumstance, respecting the comfort of patients, which seems of much practical value: the passages on the first and second floor are spacious, and provided with sofas, tables, &c., and are intended as a kind of sitting-rooms for the patients, the latter being allowed to spend, in these warm and comfortably-furnished passages, the time which is not strictly given to the bed-rooms.

"Phthisical patients admitted into this institution are thus placed in the best condition this country can afford, as regards the air inhaled by diseased lungs; and we noticed, whilst following Dr. Roe through the wards, that the means employed to moderate the course of the morbid process going on in the lungs of patients laboring under tuberculosis are often directed to the pulmonary mucous membrane itself, independently of other remedies which act through the circulation, and tend to promote healthy nutrition in the system at large. The time for attaching exclusive virtues to the inhalations of iodine is now past (though M. Piorry, Professor of the Theory and Practice of Physic at the Faculty of Paris, lays great stress on iodic inhalations), but it stands to reason that vapors which may soothe pain in the pulmonary texture, remove spasmodic action, and moderate inflammation and irritation in the mucous membrane of the bronchi, should be by no means neglected. It would appear that the inhalations of the watery vapors of the balsams, of creosote, &c., are much used here, and we heard Dr. Roe state that he succeeded in many instances in completely abating pain and irritation in the lungs by the inhalation of the vapor of hops. Those who have had many cases of phthisis under their care are fully aware how difficult it often is to obtain sedative effects by means of opium, hyoscyamus, conium, &c., administered by the mouth, and will be prepared to take advantage of the inhaling method, which seems to act so beneficially in this institution. It is principally in the advanced stage of the disease, when the trachea and larynx become involved, that inhalations are of value, as the pain, spasmodic cough and difficulty of breathing prove sometimes very distressing."

The New State Lunatic Hospital in Massachusetts.—This new asylum for the insane of our State, situated in Taunton, Bristol County, is now completed, and was recently delivered over to the Board of Trustees, by the chairman of the Board of Commissioners who have had the management of its construction. These Commissioners were the Hon. George N. Briggs of Pittsfield, Dr. J. W. Graves of Lowell, and Gen. Jas. D. Thompson of New Bedford, and they are deserving of great credit for the faithful manner in which they have attended to their important duties. The structure is represented as complete in all departments, comprising all the modern improvements, and may be considered as a model for future lunatic hospitals. The sum of \$150,000 was appropriated by the State Legislature for the building, nearly all of which has been expended; and \$20,000 more, now to be made use of, were appropriated to furnishing it complete for use. It stands on an eminence about a mile north of the town, its grounds comprising 134 acres of land given for the purpose by the town. The front of the main edifice, as we learn from the Worcester Transcript, is towards the town, and is 348 feet long. There are also wings, and projections or lateral wings, the latter containing strong rooms, 6 by 11 feet, and 11 feet high,

for the more violent patients. The whole contains 285 rooms, all of which are warmed by steam conveyed through 30,000 feet of pipe. It is intended to open the institution for patients by the first of next April. Dr. G. C. S. Choate, of Salem, as we have previously stated in the Journal, has been appointed Superintendent.

Deaf and Dumb in New York.—Provision has been made in the State of New York, that deaf and dumb persons between the ages 12 and 25 years, belonging to the State, shall be received into the institution recently erected and opened at Washington Heights in the City of New York, and that the directors of the institution shall be paid by the State \$150 per annum for each pupil so received. The Superintendent of common schools is required to approve every application for admission.

The New Jersey Medical Reporter.—Dr. Joseph Parrish, in consequence of his removal to Philadelphia, has resigned the editorship of the Medical Reporter, published at Burlington, N. J., and Dr. S. M. Butler succeeds him.

Ranking's Half Yearly Abstract.—No 18 of this popular work has just been issued, comprising the time from July to December, 1853. It makes a volume of over 300 pages, and constitutes a valuable digest of the principal medical periodicals published during the time mentioned. Lindsay & Blakiston, Philadelphia, are the publishers.

Medical Miscellany.—Four hundred persons, afflicted with cancer, have been in the Cancer Hospital, London, since 1851, when the institution was first opened.—Dr. Vogel, the great German traveller to Central Africa, when last heard from, was working his way successfully into the far off, heretofore unknown interior. He has discovered pyramidal tombs of a very remote age. Physicians are better qualified for general travellers and explorers than any other class of educated men, as they are held in universal estimation by barbarians and savages.—It is asserted that the number of cigars consumed in Austria, annually, amounts to eight millions!—Cholera is subsiding in Paris. A few vessels have suffered by it, very sadly.—The stereotype plates and copyright of South's Household Surgery, recently sold at auction in London, brought 220 pounds sterling.—Dr. Charles Eanmes has been confirmed as Washington, as Consul to Venezuela.

MARRIED.—Elijah P. Burton, M.D., of Wardsboro', Vt. to Miss H. I. Caldwell.—At Bedford, N. H., Dr. M. G. J. Tewksbury, of Manchester, to Laura A. Riddle, of B.

DIED.—In Boston, William Hawes, M.D., 36.—At Ipswich, Mass., Thomas Manning, M.D., 79.—At Otis, Dr. William Beard, 78, a highly respectable citizen and an eminent physician.

Deaths in Boston for the week ending Saturday noon, Feb. 11th, 92. Males, 47—females, 45. Abscess, 1—accidents, 2—inflammation of the brain, 1—disease of the brain, 1—cancer, 1—consumption, 16—convulsions, 1—croup, 5—cyanosis, 1—dropsy, 5—dropsy in the head, 4—debility, 1—infantile diseases, 7—puerperal, 1—erysipelas, 1—bilious fever, 1—scarlet fever, 1—intemperance, 1—inflammation of the lungs, 18—marasmus, 1—measles, 8—old age, 2—premature birth, 1—pleurisy, 1—smallpox, 2—rheumatism, 1—teething, 5—ulcers, 1—unknown, 1.

Under 5 years, 53—between 5 and 20 years, 6—between 20 and 40 years, 21—between 40 and 60 years, 6—above 60 years, 6. Born in the United States, 64—Ireland, 22—British Provinces, 1—England, 2—Scotland, 1—Germany, 1—Hungary, 1. The above includes 12 deaths in the City Institutions.

Strafford (N. H.) District Medical Meeting.—The Strafford District Medical Society held its forty-sixth anniversary at Physician's Hall, in Dover, January 18th, 1854. A choice of officers for the ensuing year took place, and the following gentlemen were elected:—Jacob C. Hanson, M.D., Great Falls, *President*; James Farrington, Jr., M.D., Rochester, *1st Councillor*; William Waterhouse, M.D., Barrington, *2d Councillor*; Albert G. Fenner, M.D., Dover, *3d Councillor*; J. H. Smith, M.D., Dover, *Treasurer*; J. H. Paul, M.D., Dover, *Librarian*; P. A. Stackpole, M.D., *Secretary*; G. W. Garland, M.D., Meredith, *1st Orator*; T. J. W. Pray, M.D., Dover, *2d do.*; W. B. Reynolds, M.D., Great Falls, *3d do.*; M. R. Warren, M.D., Wolsborough, *Auditor*.

Drs. Smith, Bickford, Ham and Garland, were chosen delegates to the American Medical Association, to be held at St. Louis, May 2d, 1854.

Governor Martin, one of the members, delivered an oration, which we find reported in the Dover Gazette. The following extract is copied:

"Medicine has a solid basis of facts and science, the accumulation of centuries upon centuries, which have been aggregated by the most gifted and cultivated minds in the civilized world. It has its foes, and so has all good. But impotent will be all the efforts of all the empirics, the assaults of all the *pathies* and *isms* of whatever medical heresy, if the members of the regular profession only deport themselves in a just and fraternal manner to each other. They must abandon selfishness and cultivate mutual interest; they must uproot jealousy and plant mutual confidence; they must respect and love each other; delight in the fame and prosperity of each other, and extend the fostering hand to each other, especially to the young practitioner. He has more trials to meet, more difficulties to encounter, and more sleepless, anxious nights in prospect, than any member of any other calling; and he who would hedge up his way and multiply his perplexities deserves the severe reprobation of all liberal minded persons in the profession or out. Our functions to officiate at the induction of humanity into this breathing world, to observe and protect its progress through it, and to mitigate its exit out of it, are surely important, responsible, and big with vital interests."

Dr. Hanson, of Great Falls, gave the Annual Address, which was on the subject of medical etiquette. Dr. Shackford, of Great Falls, read a paper on quackery; Dr. Moulton, of Osipee, one descriptive of the objects and doings at the last session of the American Medical Association; and Dr. Bickford, of Dover, one on the *natural history* of medicine.

The papers contained much valuable and useful information, for which the Society gave the following expression:

Resolved, That the thanks of the Society be presented to the Dissertators, for the learned, instructive and eloquent papers just read, and that the same be requested for deposit in the archives of the Society, and for publication, if the Society so direct.

The meeting was largely attended, and the report of cases and the discussion upon various medical topics, together with the interesting essays, made the session full of interest.

British Association of Chemists and Druggists.—An Association under this head has been formed, with the view of establishing a "College of Pharmacy," and a Board of Examiners to grant certificates to persons properly educated and fully qualified to dispense medicines, whereby chemists and druggists will secure to themselves a professional status.—*London Lancet.*